these active products were present in the salt, and that the source of its activity must be sought for elsewhere.

The only remaining known active product whose presence in the salt could account for its activity appeared to be uranium X, and although it was not clear how such a product could become mixed with the salts of potassium, attempts were made to separate it out by recrystallization, by precipitation with ammonium carbonate, and also by treating solutions of the salts with ether after the manner of Meyer and Schweidler*. By none of these processes, however, was it found possible to effect to a measurable degree the separation of any active product.

Attempts were also made with some of the salts to separate out by electrolysis active impurities which might be present, but it was again found impossible to bring about any separation of the active constituents in this way.

XI. *Summary of Results.*

1. It has been shown that the activity of uniform layers of active potassium salts was directly proportional to the area of the salt exposed.
2. With uniform layers of a number of potassium salts the activity was found to increase with the thickness of the layer, and maximum activities were obtained with all the salts examined with layers of the salts from 2 to 3 mm. in thickness.
3. Wide variations were found in the activities of different potassium salts, and of potassium salts of the same composition obtained from different sources, and ordinarily sold as chemically pure. In particular, different samples of potassium cyanide were found to vary widely in their potassium content, but the activities of the different samples were found to be approximately proportional to the amount of potassium present.
4. The rays from the potassium salts, which were found to be heterogeneous and to possess considerable penetrating power, exhibited characteristics similar to those of the β radiation emitted by uranium X. The penetrating power of the latter, however, is somewhat greater than that possessed by the potassium rays.
5. Experiments have been described which go to show that the activity of potassium salts is not due to the excitation of a secondary radiation in the salts by the

* Meyer and Schweidler, *Wien. Ber.* 113, July 1904.